

CLAIMS

What is claimed as new and desired to be protected by Letters of Patent is set forth in the appended claims.

We claim

1. A method of governing the deployment and control of software programs over the internet and intranet to conduct business transactions in a co-operative manner, comprising of
 - a. multitude of server side services employing the server side version of the said software programs
 - b. multitude of client side services employing the client side version of the said software programs
 - c. said multitude of server side services being able to communicate with one another using the internet or intranet
 - d. said client side services being able to communicate to one of the said multitude of server side services
 - e. said method of governing the software programs controlling the authentication, deployment and operation of the software programs

whereby the said method of governing provides a means for the said client side services to interact with other said client side services without the need to conform to a common client side software, hardware, language or business practice,

whereby the said method of governing provides a means for the said client side service to employ their own methods of storing their data and viewing details of their business transactions and

whereby the said method of governing provides a means for the said client side services to interact with said server side services using the relevant said software programs.

2. The said multitude of client side services of claim 1 comprises of
 - a. means of storing data locally,
 - b. means of accessing external data through the said means of storing data locally,
 - c. means of displaying and evaluating the information that is stored or accessed by the said means of storing and accessing data
 - d. means for the said client side software to be invoked through interruption and conditions generated by the said means of storage of data and said means of displaying and evaluating information, and
 - e. means for the said client side software to access and modify the means of said storage and means of said display of information

Whereby the said client side service can operate using conditions and interruptions generated by the said data storage and display means, thus minimizing the need for manual intervention and

Whereby the said multitude of client side services can secure their data and business intelligence infringements from external sources, other said client side services and said server side services.

3. The said multitude of server side services of claim 1 comprises of
 - a. means of communicating between the said server side software and the said multitude of client side software and
 - b. means of communicating between the said server side software and the said multitude of server side software

whereby within network of said client side servers, recipient client side servers can be identified and information distributed securely between transacting client side servers, and

whereby other related services of this invention can be provided in a controlled manner.

4. A method of maintaining, managing and handling information in and between computer systems, which includes storage systems, by segregating said information into three categories, comprising of

- a. a multitude of software programs, grouped as the process layer,
- b. a multitude of business rules, grouped as the rules layer, that provide the business logics to run the said multitude of software programs of the said process layer,
- c. a multitude of means of access to stored data in external or local databases, grouped as data layer,
- d. a means for the said software programs of the said process layer to refer to information items in the said rules layer by their classified purpose and not by specific data layer names,
- e. a means for the said business rules to refer to the information items and data procedures in the said data layer by specific names and to refer to the information items in the said process layer by their data classification name,
- f. a means for recognition of data formats and conversion that is required for transmitting information between the said layers

whereby the data naming and mapping restrictions between the information items in the said process layer and the said rules layer is eliminated, and

whereby the said software programs in the said process layer can work with rules in any of the said rules layers of any other said client side rules layer as long as the required data classifications are mapped.

5. A method of initiating, conducting, concluding and monitoring a plurality of interactions between client side servers by using computer programs that are created to perform functions related to particular parts of the interaction process, comprising of

a. a group of said software programs known as the foundation class programs that comprises of programs to provide functionalities for

- i. discovery
- ii. negotiate
- iii. facilitate
- iv. monitor
- v. close
- vi. audit and
- vii. alert processes,

phases of the interaction process,

b. a group of said software programs known as the origin class programs that comprises of programs to provide functionalities for

- i. creation
- ii. propagation and
- iii. destruction processes

for the said executable programs in 5c, below

c. a means of creating an executable program to process the objective of a phase by combining one of the programs from the said foundation class and all programs from the said origin class and

d. a means of accessing data using said data classification names

whereby the said interaction process end results can be accomplished by said executable programs working in a coordinated fashion without strict control over the sequence in which they are executed, thus giving a flexibility to adapt these said executable programs to different business practices,

whereby the said executable programs can operate bypassing error conditions, and reattempt execution of the said interaction process and not interfere with said executable programs performing other said interaction processes and

whereby the said executable programs can be shared by other interaction processes in other said client servers.

6. The said business process of claim 5 comprises of

a. means of building agents to accomplish end results of various phases of the said interaction process,

- b. a means of combining the said executable program of claim 5 with the said business rules of claim 4 to construct said agents and
 - c. a means for the said agents to access the data in the said data layer in claim 4 through the rules in the said rules layer in claim 4.
- 7. The logics of the said agents of claim 6 will comprise of
 - a. a means to invoke the agent based on the conditions in the said interruption or data store of claim 2 or time
 - b. a means to start the agent processing if not already running and update the log files in the said data store of claim 2
 - c. a means to update the log files contained in the data store of claim 2 with the end result, being, successful completion, could not proceed, or terminated,
 whereby the said log files can be verified and agent processes can be kept independent of other processes.
- 8. The logics for said agents of claim 6 for specialized warning agents will comprise of
 - a. A means to verify the said log files of claim 7 and either allow restart of the agent processing or set up an alert in the log file.
- 9. The said agents of claim 6 for specialized alert agents will comprise of
 - a. a means to verify if active agents have exceeded their run duration or created conditions that warrant termination of the said agent, and
 - b. a means to release resources held by the agent and terminate the agent,
 whereby processing by other agents can continue without interruption.
- 10 A means of providing auditing facilities to create audit reports and files of agents of claim specializing in audit, comprising of,
 - a. the said log file of claim 7,
 - b. a means of displaying or printing audit results and reports,
 whereby the audit records for end results of interaction processes can be created and maintained.
- 11 A method for providing secure transmission and reception of information comprising of:
 - a. means of splitting and encoding messages to pass through the Internet or intranet and
 - b. means of decoding and recombining messages
 whereby the business intelligence is shared only by the intended parties of the transaction process.
- 12 A method of distributing said executable programs of claim 5 in a controlled and secured means consisting of
 - a. a means to store and distribute the said executable programs of claim 5

- b. a means of storing programs to provide management of a library of programs
- c. the means of building executable programs of claim 6

whereby the information of the said process layer in claim 4 can be transmitted and received by the interacting parties,

whereby the said server side of the receiving party can check and provide the appropriate said software program for the said process layer to the said client server of the recipient,

whereby the recipient's said client side server creates the said agent automatically to conduct the interaction requested by the sending said client side server.